ENVIRONMENTAL PLANNING

Laws Affecting Non-Living Resources

"Environmental Compliance Issues"

Chapter 3

HO #s 6-9

Laws Affecting Non-living Resources

Objective: To introduce the student to the environmental resource laws expected to be encountered during the Civil Works Planning Process

Laws Affecting Non-Living Resources

- Major Environmental Laws Include:
  - Clean Water Act
  - Clean Air Act (CAA)
  - Coastal Zone Management Act (CZMA)
  - Wild and Scenic Rivers Act
  - Marine Protection, Research & Sanctuaries Act (MPRSA)
  - Farm Protection and Policy Act

Clean Water Act 1977, PL 95-217

“Placement of Fill in Waters of the US”

What are the “Waters of the US”?

http://www.epa.gov/regulations/laws/cwa.html

Clean Water Act 1977, PL 95-217

- The Clean Water Act is the principle law governing pollution control and water quality of the nation's waterways.

- The main purpose is to restore/maintain the chemical, physical and biological integrity of the nation's waters.

Clean Water Act 1977, PL 95-217

- The Act specifically defines USACE responsibilities for regulating discharge of dredged and fill material in waters of the United States including jurisdictional wetlands.
- The Corps' regulatory role differs from the civil works activities although ultimately requirements for compliance are the same.

Clean Water Act 1977, PL 95-217

- Enacted as the Federal Water Pollution Control Act. 1948, PL 80-845.
- Revised numerous times.
- Current name provided in 1977.
- 1972 Amendments, PL 92-500, added Section 404 regulating the discharge of fill into the waters of the US (Rivers and Harbors Act of 1899).

Clean Water Act 1977, PL 95-217

- Goals:
  - Eliminate pollutant discharge.
  - Make waters safe for fish, shellfish, wildlife and people.
- The Act includes numerous provisions.
- We will concentrate on Sections 102 (b), 401, 402, and most importantly Section 404.

Clean Water Act 1977, PL 95-217

- Section 102(b).
  - Requires the consideration of storage for the regulation of stream flows in reservoir planning.
- Section 401. (Water Quality Certification)
  - Federal sovereign immunity is waived.
  - State certification required for a project to be in compliance with established effluent limitations and water quality standards.

Clean Water Act 1977, PL 95-217

- Section 402.
  - Establishes discharge requirements under National Pollutant Discharge Elimination System (NPDES).
  - Replaced 1899 refuse discharge authority of the Corps of Engineers.
  - Construction sites over 1 acre are considered a Section 402 point source discharge (effective March 2003).

Clean Water Act 1977, PL 95-217

- Section 404.
  - Regulates the discharge of dredged or fill material into the waters of the U.S.
  - Corps' projects must comply with the 404(b)1 guidelines.
  - Significant regulatory role for the Corps of Engineers http://www.usace.army.mil/inet/functions/cw/cecwo/reg/index.htm.
  - Can be a major point of controversy between agencies-mitigation ratios.

Clean Water Act 1977, PL 95-217

- Section 404 (cont)
  - 404 (b)(1) Guidelines.
    - 40 CFR Part 230 Guidelines for the Specification of Disposal Sites for Dredged or Fill Material, FR Vol. 45, Wed Dec 24, 1980.
    - Format: Exhibit C-1 page 48 Appendix C of ER 1105-2-100.

Clean Water Act 1977, PL 95-217

- 404 (b)(1) Guidelines (cont).
  - Requires **sequential** avoidance, minimization and compensation where practicable.
  - The 404 (b)(1) format lays out a list of items that must be addressed in the analysis of impacts associated with the placement of the fill.
  - Opportunity to incorporate with analyses required by NEPA. See 40 CFR 1502.25.

Clean Water Act 1977, PL 95-217

- 404 (b)(1) Guidelines (cont).
  - Basis for a request of 401 Water Quality Certification from the state regulatory agency.
  - Without a 404 fill activity the state has no jurisdiction to issue a 401 WQC.
  - Inclusion in an EIS going to Congress triggers 404(r) exemption.
    - Use limited in states with control of 404 process.
    - Corps' Policy is to apply for 401 Certificate.

Clean Water Act 1977, PL 95-217

- Ocean Issues:
  - Disposal will be addressed under the Marine Protection Research and Sanctuaries Act.
  - Fill is addressed under the Clean Water Act.
- Non-Point Source Pollution.
  - Program (Section 319). Corps' projects must be consistent with EPA approved

Clean Water Act 1977, PL 95-217

Classroom Activity

- Conduct a 404(B)(1) analysis
- Handout compliance table
- Review for Field Exercise
- See Handout #s 7 & 8

Clean Air Act 1970, PL 91-604

"General Conformity Rule"

The purpose of this act is to protect public health and welfare by the control of air pollution at its source.

Critical Air Pollutants

- Based on Scientific Health Effect's Criteria
  - Ozone (NOx & VOC, which are both ozone precursors)
  - Carbon Monoxide (CO)
  - Particulate Matter (PM-10; 2.5)
  - Nitrogen Dioxide (NO_2)
  - Sulfur Dioxide (SO_2)
  - Lead (Pb)

National Ambient Air Quality Standards for Critical Pollutants

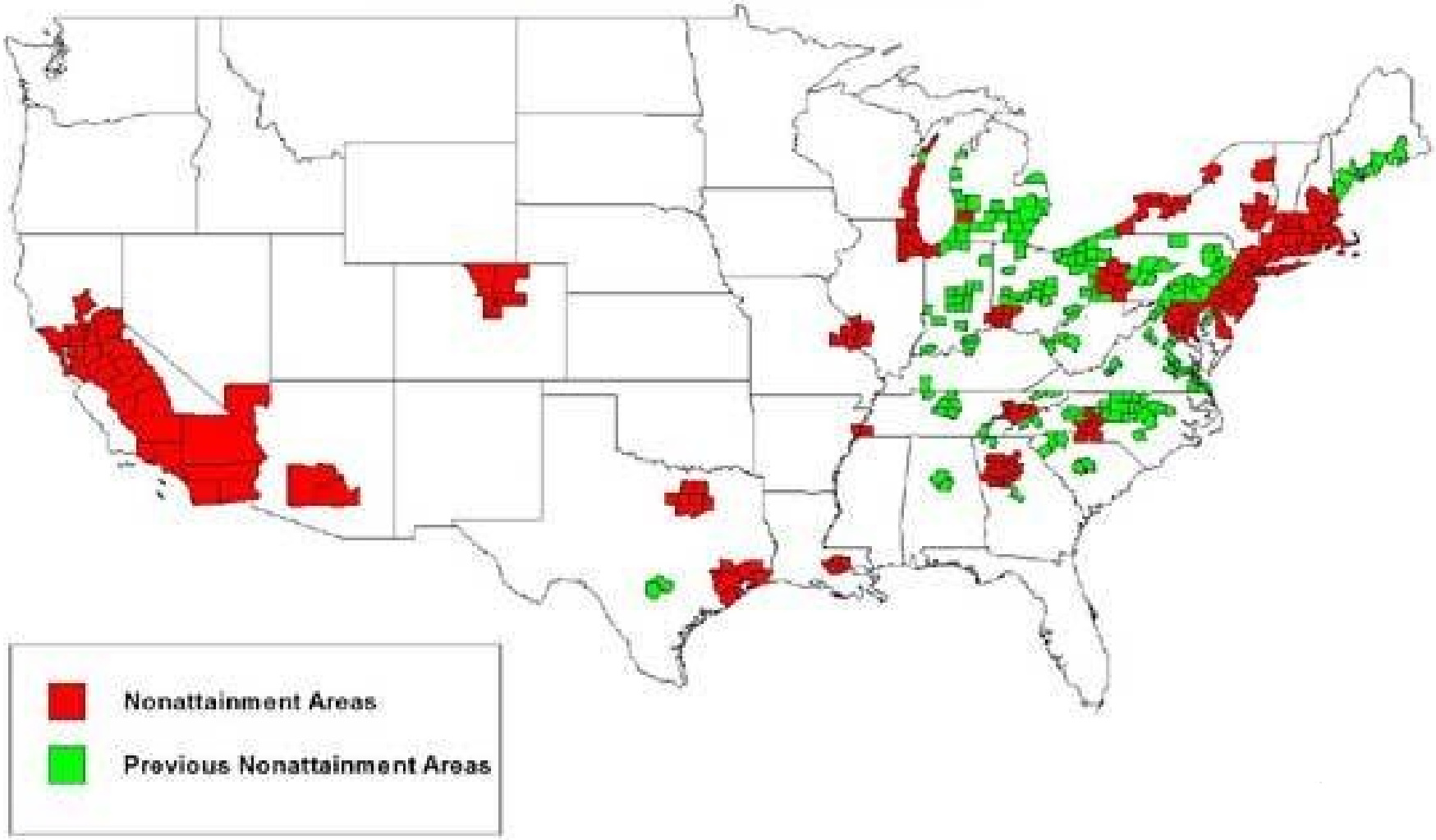
Critical Pollutant	Averaging Period	Primary Standard	Secondary Standard
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean 24-Hour Average 3-Hour Average	0.03 PPM 0.14 PPM None	None None 0.50 PPM
Particulate Matter (PM_{10})	24-Hour Average	150 µg/m³	150 µg/m³
Particulate Matter ($PM_{2.5}$)	Annual Arithmetic Mean 24-Hour Average (2006 Std)	15 µg/m3 35µg/m³	15 µg/m3 35 µg/m³
Carbon Monoxide (CO)	8-Hour Average 1-Hour Average	9 PPM 35 PPM	None None
Ozone (0_3)	8-Hour Average (1997 Std) 8-Hour Average (2008 Std) 1-Hour Average (revoked)	0.084 PPM 0.075 PPM 0.12 PPM	0.084 PPM 0.075 PPM 0.12 PPM
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.053 PPM	0.053 PPM
Lead (Pb)	3-Month Arithmetic Mean	1.5 µg/m³	1.5 µg/m3

Clean Air Act 1970, PL 91-604

- Applicable in all areas
- We will emphasize those listed as “non-attainment or as maintenance”areas for National Ambient Air Quality Standards (NAAQS) requiring General Conformity.
- 40 CFR 93

Current Nonattainment and Previous Attainment Areas

8-Hour 1997 Ozone Standard

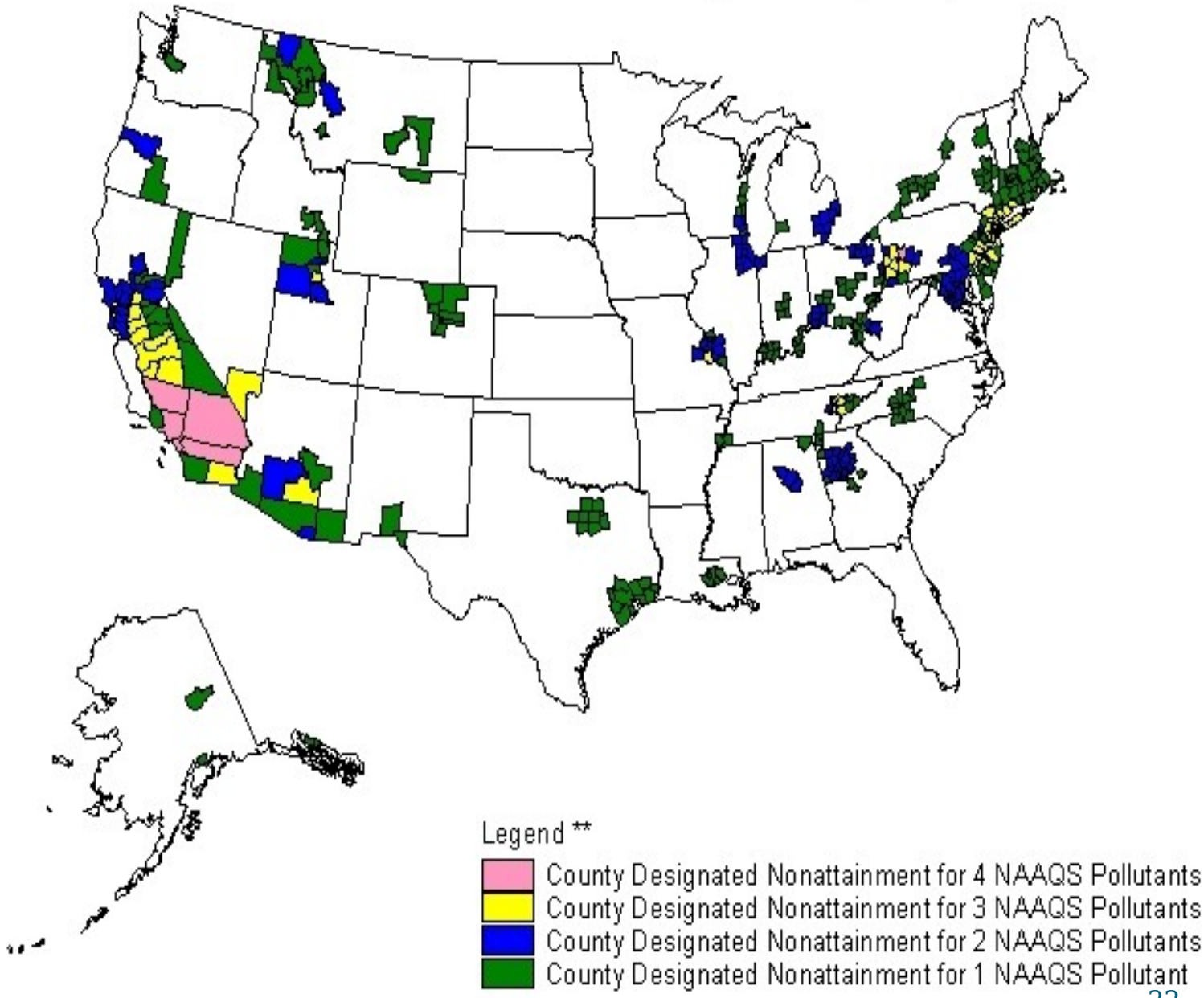


Source: U.S. EPA

A.S.L. & Associates, Helena, Montana

Counties Designated "Nonattainment"

for Clean Air Act's National Ambient Air Quality Standards (NAAQS) *


Legend **
County Designated Nonattainment for 4 NAAQS Pollutants
County Designated Nonattainment for 3 NAAQS Pollutants
County Designated Nonattainment for 2 NAAQS Pollutants
County Designated Nonattainment for 1 NAAQS Pollutant

Clean Air Act 1970, PL 91-604

- Requires the States to develop Implementation Plans to obtain and maintain compliance with National Ambient Air Quality Standards (NAAQS).
  - State Implementation Plan (SIP).
    - Strategy by which the state plans to meet and maintain (NAAQS) requirements.
    - Budgets emission quotas for various sources.
    - EPA approval required.
    - Federal Agencies ***Conform*** to this plan

Types of Conformity

- Transportation Conformity (TC)
  - Federal Highway Administration funded projects
  - Federal Transit Act projects
    - Ferries are included in TC
- General Conformity
  - Everything else involving federal funding
- Mutually exclusive

What is General Conformity?

- It is the federal government's attempt to ensure that federal actions do not cause or contribute to a state failing to meet NAAQS.
- Requires the federal government to take a major role in meeting the clean air standards
- How does one do that?

How to Determine if Emissions are Above Threshold levels?

- Prepare an Emission Analysis (on annual basis)
  - Sum of Total Direct and Indirect Emissions for Action
    - Direct
      - Caused by the action
    - Indirect
      - Removed in time or space from action
  - Reasonably foreseeable
- Why would you want to know if you exceed threshold emission levels?

Determining Conformity of General Federal Actions

De Minimis Levels 40 CFR Part 93.153

CRITERIA AND PRECURSOR POLLUTANTS	TYPE (NONATTAINMENT OR MAINTENANCE) AND SEVERITY OF NONATTAINMENT AREA	TONS PER YEAR THRESHOLD Emission Rates
Ozone (precursors VOC or NO_R)	Serious nonattainment	50
	Severe nonattainment	25
	Extreme nonattainment	10
Ozone (NOR)	Marginal and moderate nonattainment inside an ozone transport regions	100
	Maintenance	100
Ozone (VOC)	Marginal and moderate nonattainment inside an ozone transport region	50
	Maintenance within an ozone transport region	50
	Maintenance outside an ozone transport region	100
Carbon monoxide (CO)	All nonattainment & maintenance	100
Sulfur dioxide (SO_2)	All nonattainment & maintenance	100
Nitrogen dioxide (NO_2)	All nonattainment & maintenance	100
Fine particulate matter (PM 2.5)	Serious nonattainment	70
	Moderate nonattainment and maintenance	100
Course particulate matter (PM_{10}) (precursors VOC, NO_R, NH_3, and SO_R)	All nonattainment and maintenance	100

General Conformity Requirements

- Prepare an analysis of your project's compliance with NAAQS*
- Report your findings (40 CFR 93.155)
  - Preparation a Statement of Conformity (SOC) *
  - Provide public Notice to EPA and state and local agencies.
  - Becomes part of your Feasibility Study
- Remember the SOC is not the EPA Section 309 NEPA review

*HO #6 (on disk)

*http://www.epa.gov/air/criteria.html

General Conformity Requirements

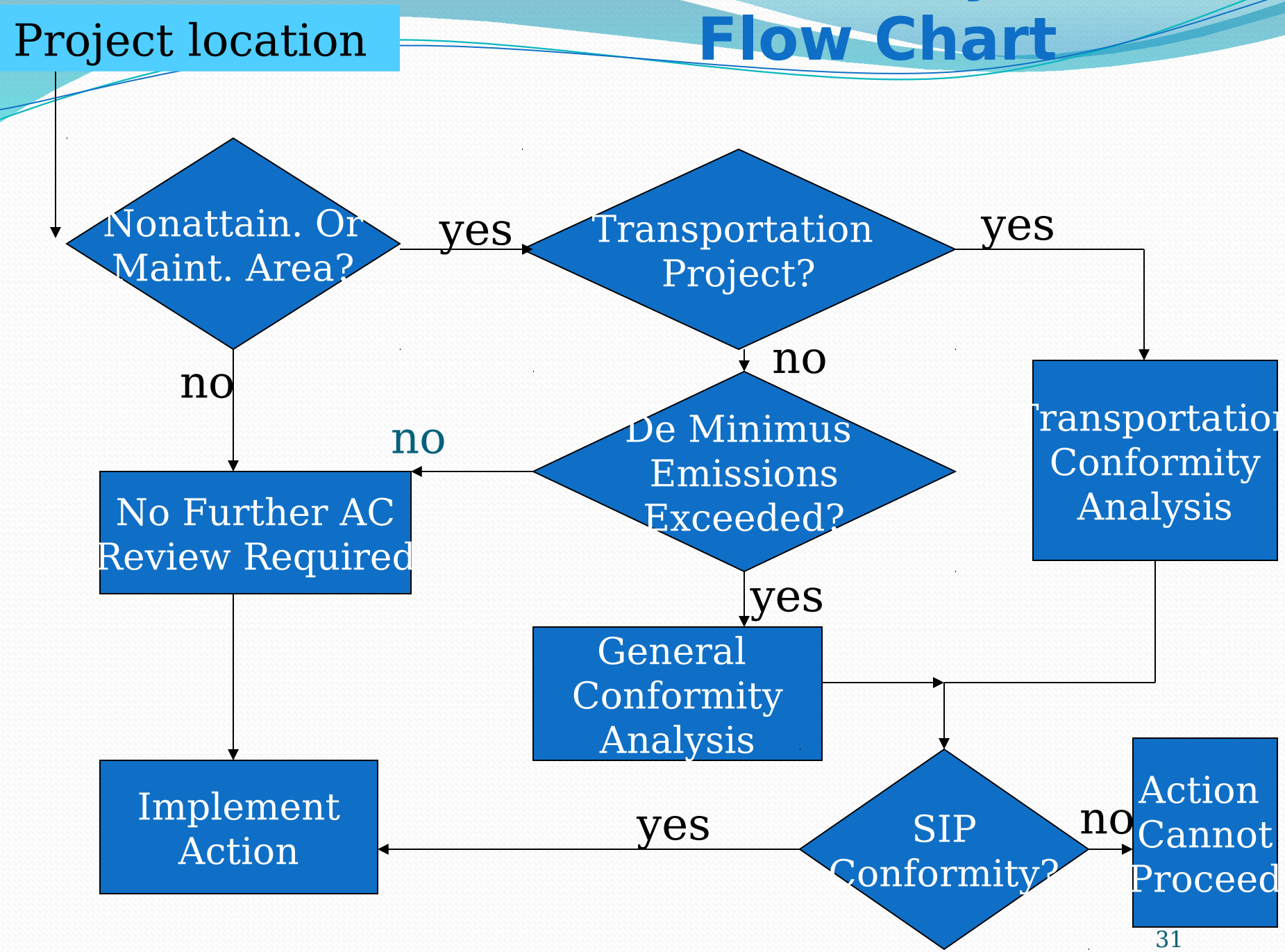
- Circulation (40 CFR 93.156).
  - Legal notice in Newspaper allowing 30 days for written comments.
  - Comments and responses must be available within 30 days of the draft conformity determination.
  - Can run concurrent with NEPA reviews.

Air Quality

- Documentation
  - Record of Non Applicability (RONA)
    - **Action generates regulated pollutants below a SIP's threshold limits.**
  - Statement of Conformity (SOC**)**
    - **Action generates regulated pollutants which exceed 10% of the threshold limits listed in the State's SIP.**
    - **Action exceeds SIP Threshold or De Minimis Levels described as Emission Rates**

HO # 6

CAA Conformity Process Flow Chart



Air Quality- Take Away Points

- Section 176(c) CAA requires Federal activity compliance with the state's SIP.
- Statement of Conformity (SOC)(40 CFR 93.158) or Record of Non Applicability (RO|NA)(40 CFR 93.153(c)).
  - Analysis of project's compliance with the SIP & NAAQS.
  - Should be incorporated into the NEPA document (40 CFR 1502.25).
- Federal Sovereign immunity is waived.
  - "the king can do no wrong"

Coastal Zone Management Act 1972, PL 92-583

"Determination of Consistency"

http://coastalmanagement.noaa.gov/czm/czm_act.html

Coastal Zone Management Act 1972 PL 92-583

- Purpose: Preserve, protect, develop, restore and enhance the resources of the nation's coastal zone for current and future generations.

Coastal Zone Management Act 1972 PL 92-583

- Definitions:

Coastal Zone- coastal waters to the limits of territorial seas or international boundaries.

Coastal Waters- Great Lakes, connecting waters, and waters adjacent to shorelines; i.e. bays and estuaries.

Coastal States - includes those states

Coastal Zone Management Act 1972 PL 92-583

- NOAA authorized to provide grants to 30 states and four territories to develop management plans.
- Special Area Management Plans (SAMPs) are an opportunity for planners to collaborate with state CZM staff.
- Important Sections:
  - Section 302.
    - Declares national interest in coastal zone.
    - Delegates primary responsibility to states

Coastal Zone Management Act 1972 PL 92-583

- Section 303.
  - Federal agencies shall cooperate with state and local governments to effect the purpose of the law.
  - Federal sovereign immunity waived.
  - Applicable out to 3 mile limit.

Coastal Zone Management Act 1972 PL 92-583

- Section 307.
  - Federal Agencies required to assure projects are consistent with the approved State Management Plans to the maximum extent practical.
  - Preparation of a Coastal Consistency Determination (CCD) by the Federal agency proposing the action.

Coastal Zone Management Act 1972 PL 92-583

CCD (continued).

- Includes an evaluation of the relevant provisions of the State's Management Plan, project description, project effects and supporting data for the conclusions of the CCD.
- Agency call on conformity.
- Should be included in NEPA document. See 40 CFR 1502.25.

Coastal Zone Management Act 1972 PL 92-583

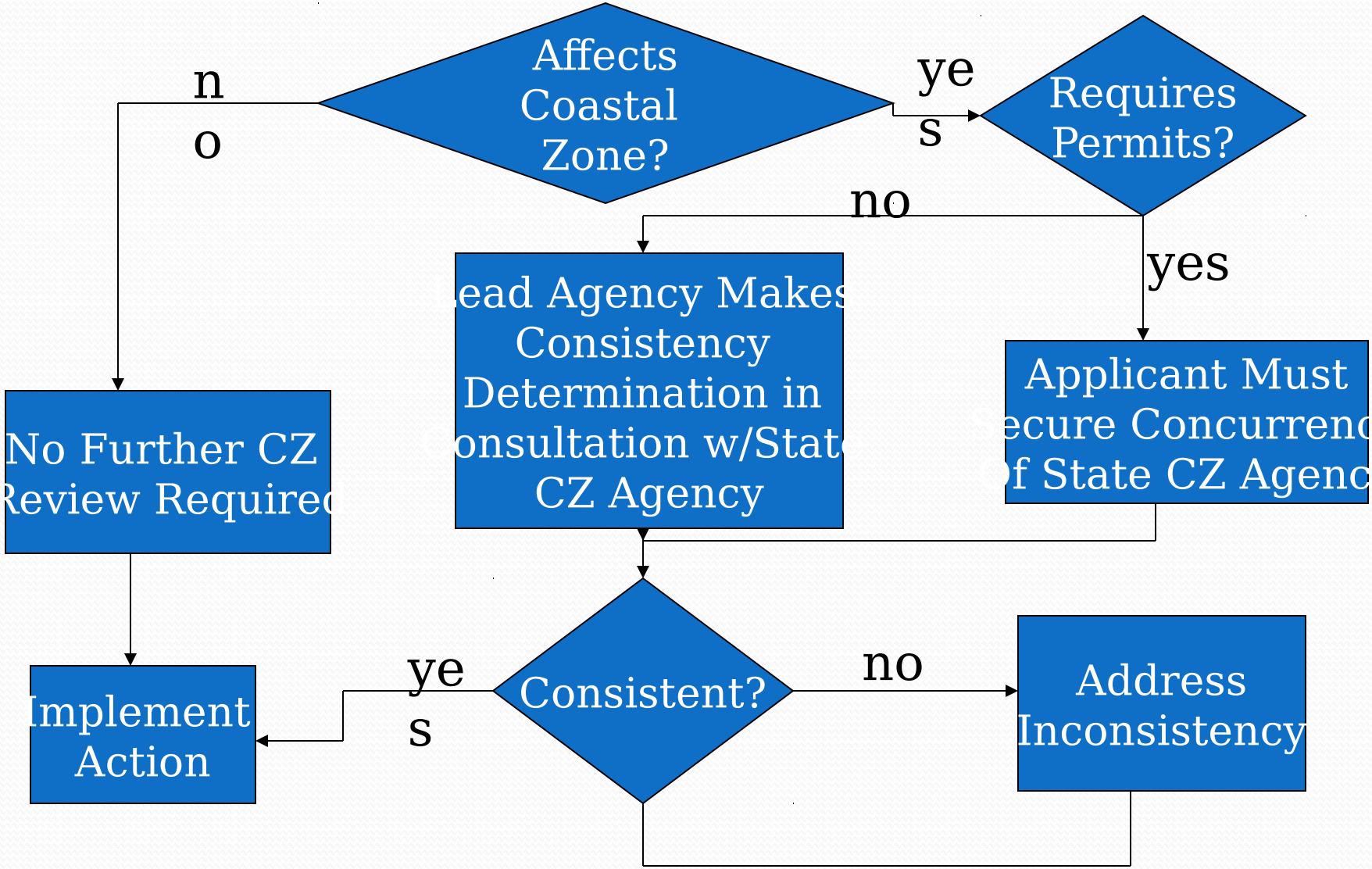
CCD (continued).

- State Response required within 45 days following receipt of CCD.
  - Extension of time-15 day maximum can be make upon request.
  - No delay of project if agency considers it to be consistent with States Coastal Management Plan.

Coastal Zone Management Act 1972 PL 92-583

- Conflict Resolution Process.
  - **Mediation** process chaired by Secretary of Commerce with cabinet level agency representation.

CZM Process Flow Chart



Wild & Scenic Rivers Act
1968 PL 90-542

"Preservation and Protection of Rivers for Future Generations"

http://www.rivers.gov/wildriverslist.html

Wild & Scenic Rivers Act 1968 PL 92-542

Definitions:

- Wild Rivers--Primitive, free flowing, inaccessible except by trails.
- Scenic River Areas--Free flowing, shorelines and watershed largely primitive, accessible in places by roads.
- Recreational River Areas--Readily accessible by road or rail with some development and possible past impoundment or diversion.

Wild & Scenic Rivers Act 1968 PL 92-542

Purpose: To protect free flowing streams.

- Established the National Wild and Scenic River System.
- Currently 203 Rivers totaling 12,560 Miles in the system in 40 states .
  - 6,157 miles designated as wild.
  - 2,749 miles designated as scenic.
  - 3,654 miles designated as recreational.

Wild & Scenic Rivers Act 1968 PL 92-542

- Six agencies; COE, BLM, NPS, USFWS and USFS manage these river segments.
- Administered by National Park Service, and Forest Service.
- Corps Activities are subject to review by responsible agency.

Wild & Scenic Rivers Act 1968 PL 92-542

Review and Consultation Requirements.

- Consult list of rivers segments in project area.
- Coordinate and consult with managing.

agency during the scoping process.

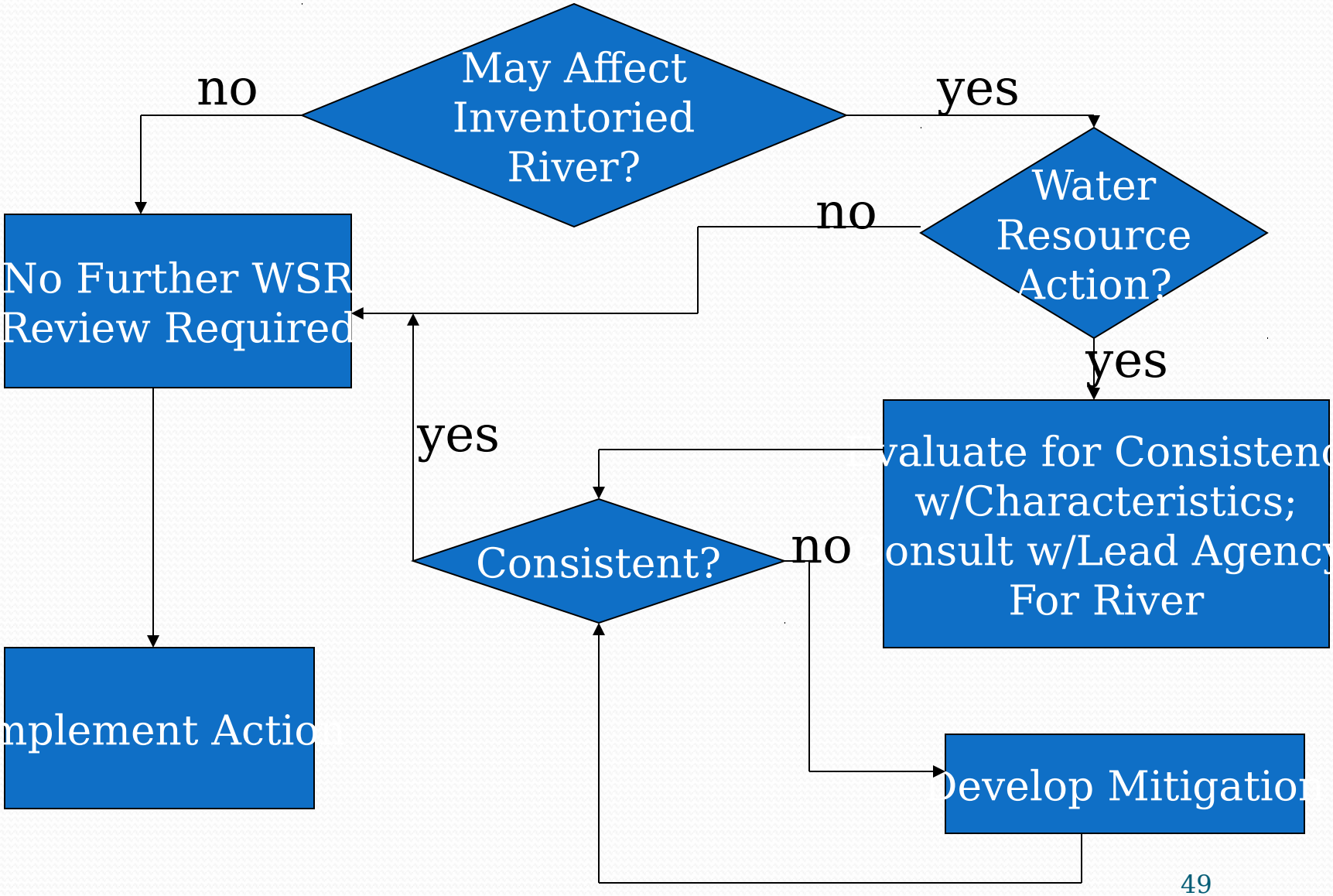
- Determine if project would foreclose classification of the inventory segment as wild, scenic

Wild & Scenic Rivers Act 1968 PL 92-542

Review Consultation Requirements (cont).

- Include analysis of impacts on ecological values of river segment in the NEPA document.
- Include appropriate mitigation consistent with agency's authorities.
- Opportunity to incorporate in analyses required by NEPA. See

Wild & Scenic Rivers Process Flow Chart



Marine Protection Research & Sanctuaries Act 1972, PL 92-532

"Ocean Disposal of Dredged Material"

3 mile limit

http://www.epa.gov/history/topics/mprsa/

Marine Protection Research & Sanctuaries Act 1972, PL 92-532

- Purpose is to regulate ocean dumping.
- Targets degradation of the marine environment.
- Provides permit process for dredge material disposal.
- Establishes Marine Sanctuary Program to preserve and or restore ecological, recreational or aesthetic values

Marine Protection Research & Sanctuaries Act 1972, PL 92-532

Section 102.

- Charges the Administrator of EPA to:
  - Promulgate Ocean Disposal Criteria.
  - Designate Ocean Disposal Sites.
- Authorizes the SEC Army to issue permits for transportation and disposal of dredge material meeting EPA criteria.

Marine Protection Research & Sanctuaries Act 1972, PL 92-532

Compliance Requirements:

- Disposal must be evaluated under Section 103 of MPRSA.
- Evaluation procedures are in “Testing Manual - Evaluation of Dredged Material Proposed for Ocean Disposal” (EPA/COE-503/8-91/001).
- Regional Implementation Manuals.

Farmland Protection Policy Act 1981

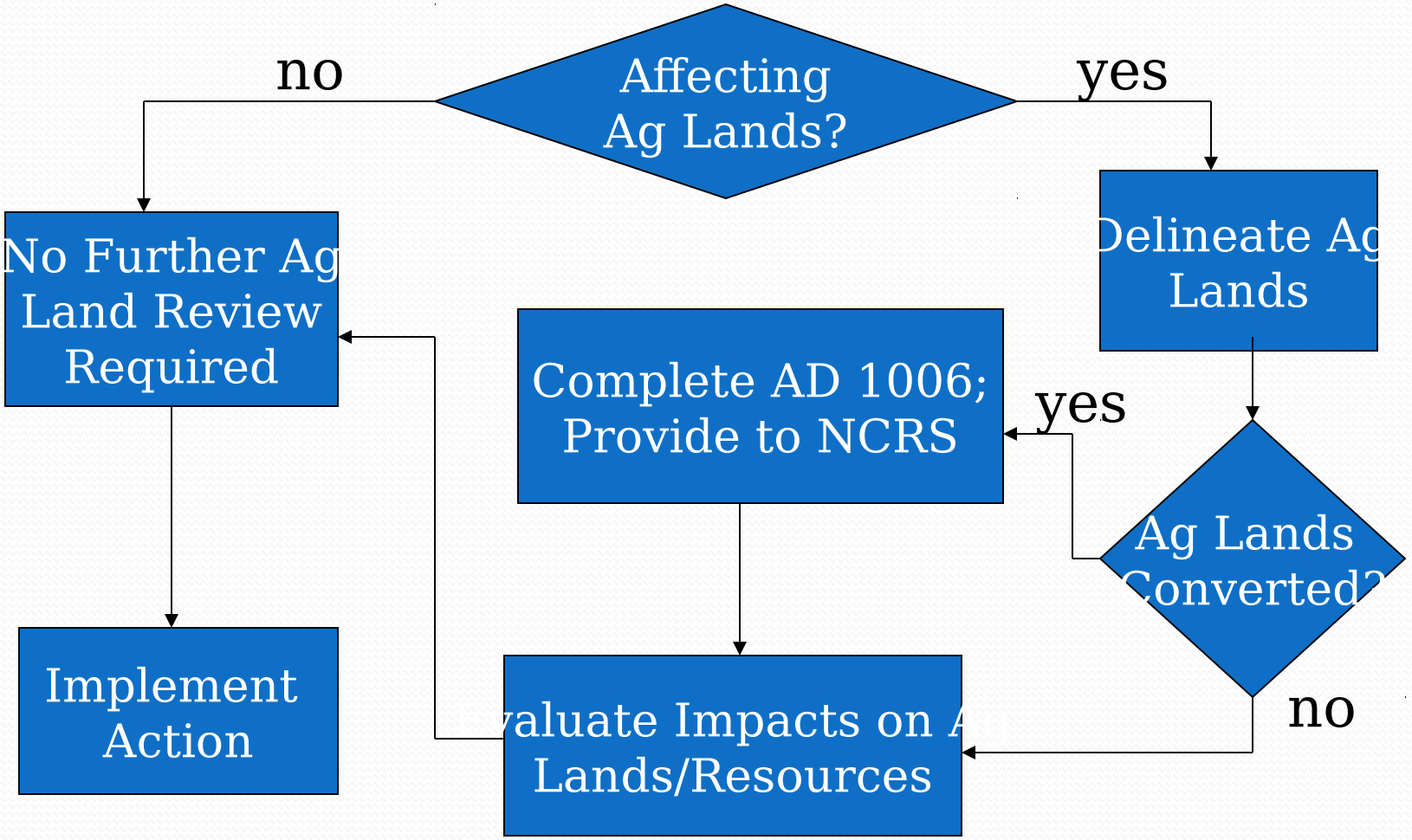
"Conversion of Farmland to Nonagricultural Uses"

http://www.nrcs.usda.gov/programs/fppa/

Farmland Protection Policy Act 1981

- Purpose: To minimize farmland conversions.
- Administered by Natural Resources Conservation Service (NRCS).
- Contact NRCS for listing of prime and unique farmlands.
- Complete Farmland Conversion Impact Rating Form (Form AD 1006).
- Include analysis in NEPA document.

Prime Farmlands Process Flow Chart



Laws Affecting Non-Living Resources

Take Away Points.

- There are numerous environmental laws affecting non-living resources. We've only touched on a few of the more common ones relative to the Corps Civil Works planning process.
- CAA – " Statement of Conformity" for SIPs in "non-attainment" areas.
- CWA – "404 (b)(1) Evaluation for placement of dredged or fill material into water of the U.S.
- FPPA- Farmland Conversion Form AD 1006.

Laws Affecting Non-Living Resources

Take Away Points (cont.)

- CZMA – Prepare a Coastal Consistency Determination to assure projects consistency with the State Management Plans.
- W&SRA-Consult with managing agency.
- ***These regulations can have permitting aspects either directly or indirectly as a result of the adoption of recommendations by permitting agencies.
- See HO # 9 for Checklist